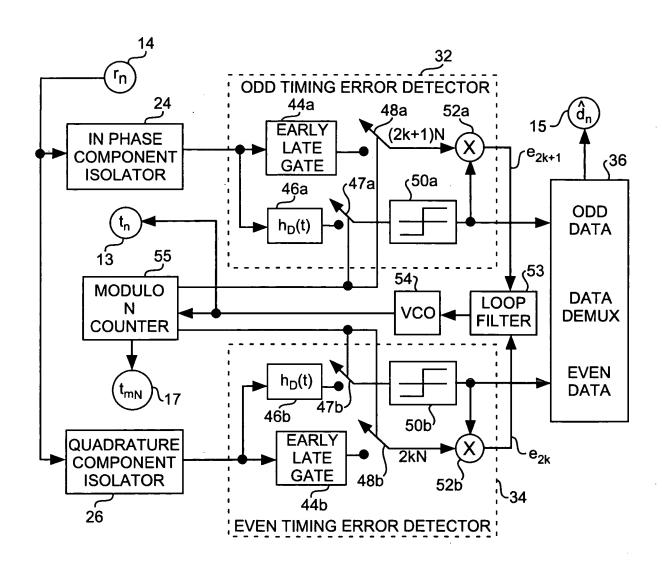


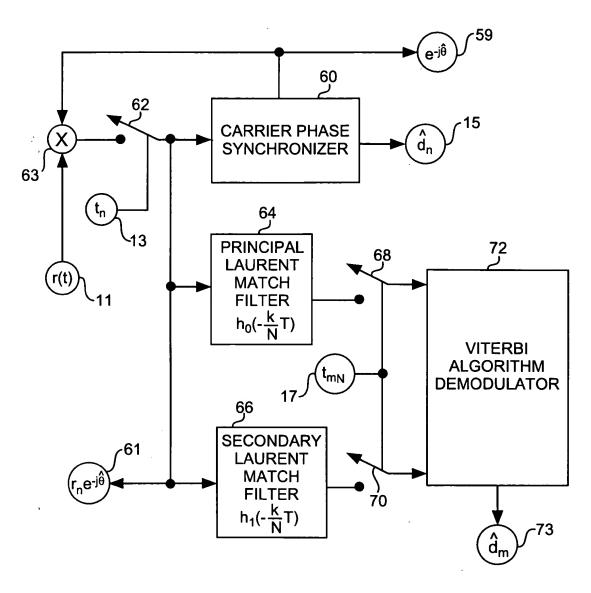
SYMBOL TIME SYNCHRONIZED DATA DEMODULATOR

FIG. 1A



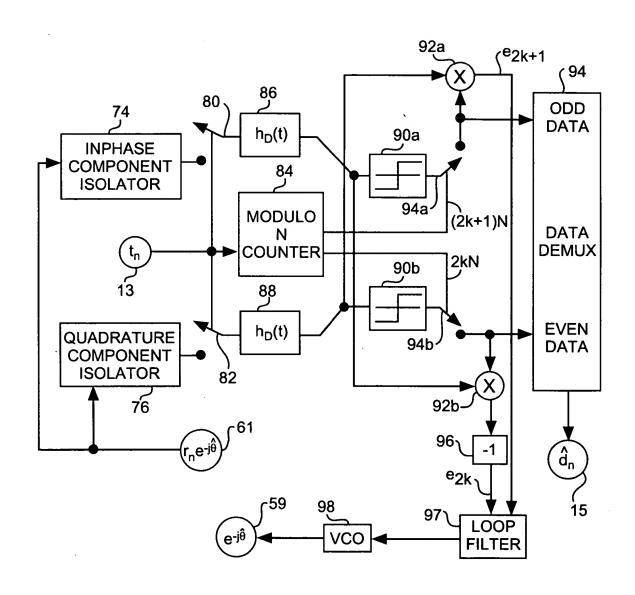
SYMBOL TIME SYNCHRONIZER

FIG. 1B

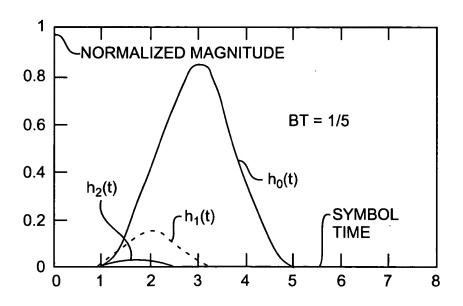


CARRIER PHASE SYNCHRONIZED DATA DEMODULATOR

FIG. 2A

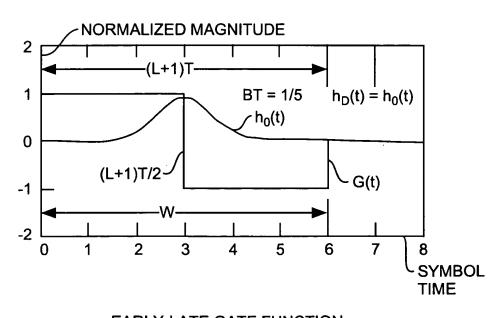


CARRIER PHASE SYNCHRONIZER FIG. 2B



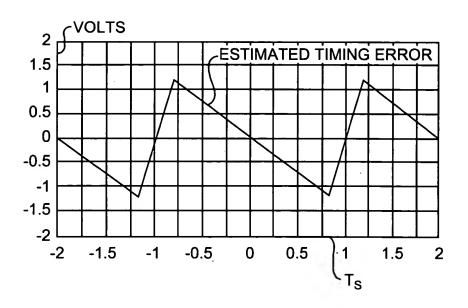
LAURENT PULSE FUNCTIONS

FIG. 3

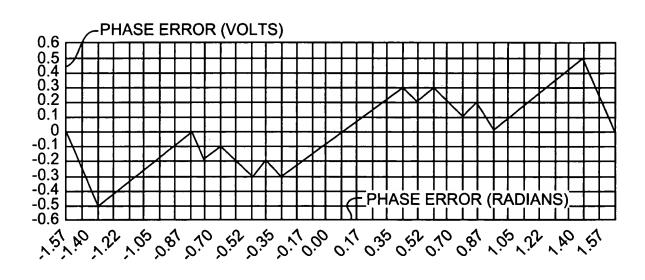


**EARLY-LATE GATE FUNCTION** 

FIG. 4



SYMBOL TIMING ERROR DISCRIMINATOR CURVE FIG. 5



CARRIER PHASE ERROR DISCRIMINATOR CURVE FIG. 6